Aero Design Ltd.

Work Order Control Sheet

Work Order#: 2017-02 **Date Opened:** 03 January 2017 **Title:** Fabrication

Aircraft OEM: Airbus Helicopters **Aircraft Model:** AS350/AS355 **Product Type:** Beams **Product Model:** LH **Quantity:** 20 Aft LH

Work Order Contents

	Initial or N/A
Work Order/Build Sheets (Procedures Provided)	JC
Additional Work Sheets (Standard Practice)	N/A
Drawings (See List Below)	JC
Parts Distribution Sheet	JC
Sub Component Tags	N/A
Completed Certification (Original)	N/A
Time Sheet (R&D)	N/A
Notes	N/A

Build Sheet Contents

Tasks Initialled	JC
Dual Inspections Initialled	JC

Drawing List

Drawing #	Rev #	Description	Initial or N/A
78633	1	Aft Beam	JC

Component Completion

	As Instructed
Quantity Complete on This Work Order	20
Quantity Incomplete on This Work Order	N/A
Further Processing Required Before Release	N/A
Release to Stock as Components	N/A

Certification

	Initial or N/A
Form One Completed	JC
Serviceable (Green) Tag Completed	N/A
In Process (Yellow) Tag Completed	N/A
Unserviceable (Red) Tag Completed	N/A
Parts Tracking Tags (White) Completed	JC
Parts Placed in Stores for Distribution	N/A

Additional Documentation

	Initial or N/A
Documentation of a minor change	N/A
Non-Conformance Report Required	N/A
Service Difficulty Report Required	N/A

Billing

Local (Aero Design)	JC
Research and Development	N/A
Third Party	N/A

Traveller

~~1 x used for demonstration, no Form 1 issued~~ JC. N/A

Work performed by: Print: D. Bartfai Sign: CeL for D. Bartfai SCA: AD07 Date: 03-Apr-17

ICC / Dual Inspection preformed by: Print: J. Rekve Sign: [signature] SCA: AD01 Date: 03-Apr-17

Work Order closed by: Print: J. Clarke Sign: CeL. SCA: AD02 Date: ~~4 May 17~~ 21 SEPT 2017

Aero Design Ltd.
9888 A Malaspina Rd. Powell River, BC, V8A 0G3
Phone: 604-483-2376 Fax: 604-483-2372 E-mail: info@aerodesign.ca

AMF 73-04

Nomenclature: AA cap RH No. of pieces: 10
Manufacturer: Aero Design Ltd
Part No.: 78633-06 Serial/Batch No.: 3021
TTSN: N/A TSO: N/A Rem.: N/A
Work Order No.: 2016-100
Remaining Tasks to be Performed: Weld in place

Signature: Dan Butt
Date: Aug 5/16 Lic. No. / SCA AD-07

Form# 20.E.03 Rev. 1 24 April 2014

In Process

Aero Design Ltd.

9888 A Malaspina Rd. Powell River, BC, V8A 0G3

Phone: 604-483-2376 Fax: 604-483-2372 E-mail: info@aerodesign.ca

AMF 73-04

In Process

Remarks

Aero Design Ltd.

9888 A Malaspina Rd. Powell River, BC, V8A 0G3

Phone: 604-483-2376 Fax: 604-483-2372 E-mail: info@aerodesign.ca

AMF 73-04

Nomenclature: UPPER GUIDE (LH) No. of pieces: 40

Manufacturer: AERO DESIGN LTD.

Part No.: 78633 - 04 - 02 Serial / Batch No.:

TTSN: N/A TSO: N/A Rem.: N/A

Work Order No.: 2015-69

Remaining Tasks to be Performed: WELD TO BEAM

Signature:

Date: 09 DEC 2015 Lic. No. / SCA ADO2

In Process

Aero Design Ltd.
9888 A Malaspina Rd. Powell River, BC, V8A 0G3
Phone: 604-483-2376 Fax: 604-483-2372 E-mail: info@aerodesign.ca
AMF 73-04

Remarks

In Process

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0042
4. Organization Name and Address		5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3		WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:	14a. ☐ CAR 571.10 Maintenance Release ☐ Other regulation specified in block 12
☒ Approved design data and are in condition for safe operation. ☐ Non approved design data specified in block 12.	Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	14b. Signature	14c. Approved Organization Number
AD 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**14d. Name**	**14e. Date (dd/mmm/yyyy)**
Jeff Clarke - AD02	18 Jan 2017		

Installer Responsibilities

This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

DELTA HELICOPTERS

Aero Design
Parts Distribution Sheet

WO# _____

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	1	AFT LH BEAM	78633-01-02	
15066	1	GRIP TAPE	3M SAFETY WALK	

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0059

4. Organization Name and Address	5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3	WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

~~14a.~~ ☐ CAR 571.10 Maintenance Release

☐ Other regulation specified in block 12

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	~~14b. Signature~~	~~14c. Approved Organization Number~~
AD 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**~~14d. Name~~**	**~~14e. Date (dd/mmm/yyyy)~~**
Jeff Clarke - AD02	01 Feb 2017		

Installer Responsibilities

This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

2 CE BIKES

Aero Design
Parts Distribution Sheet

WO# _______

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	1	LH Aft Beam	78633-01-02	
15066	1	GRIP TAPE		

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0066

4. Organization Name and Address	5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3	WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	2	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

14a. ☐ CAR 571.10 Maintenance Release

☐ Other regulation specified in block 12.

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	14b. Signature	14c. Approved Organization Number
AD 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**14d. Name**	**14e. Date (dd/mmm/yyyy)**
Jeff Clarke - AD02	02 Feb 2017		

Installer Responsibilities

This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

Sundance Helicopters

Aero Design
Parts Distribution Sheet

WO# ______

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	2	LH AFT BEAM	78633-01-02	
15066	1	GRIP TAPE		

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0076
4. Organization Name and Address		5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3		WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:	14a. ☐ CAR 571.10 Maintenance Release ☐ Other regulation specified in block 12
☒ Approved design data and are in condition for safe operation. ☐ Non approved design data specified in block 12.	Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	14b. Signature	14c. Approved Organization Number
AD 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**14d. Name**	**14e. Date (dd/mmm/yyyy)**
Jeff Clarke - AD02	11 Feb 2017		

Installer Responsibilities

This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

RANCO

Aero Design
Parts Distribution Sheet

WO# _______

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	1	AS350 LH AFT BEAM	76633-01-02	
16051	1	GRIP TAPE	3M SAFETY WALK	

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0084

4. Organization Name and Address	5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3	WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

14a. ☐ CAR 571.10 Maintenance Release

☐ Other regulation specified in block 12

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	14b. Signature	14c. Approved Organization Number
AD 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**14d. Name**	**14e. Date (dd/mmm/yyyy)**
Jeff Clarke - AD02	14 Feb 2017		

Installer Responsibilities

This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

HIMALAYA HELI SKI GUIDES

Aero Design
Parts Distribution Sheet

WO# ______

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	1	AS350 AFT LH BEAM	78633-01-02	
16051	1	GRIP TAPE	3M SAFETY WALK	

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0098

4. Organization Name and Address	5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3	WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

~~14a.~~ ☐ CAR 571.10 Maintenance Release

☐ Other regulation specified in block 12

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	~~14b. Signature~~	~~14c. Approved Organization Number~~
AD 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**~~14d. Name~~**	**~~14e. Date (dd/mmm/yyyy)~~**
Jeff Clarke - AD02	28 Feb 2017		

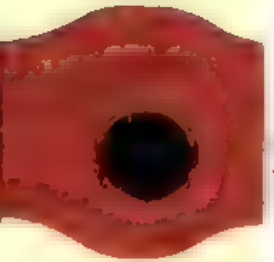
Installer Responsibilities

This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

IMS NEW ZEALAND



Aero Design Ltd.

9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity: 1
PN: 78633-01-02
Aircraft: Eurocopter Model: AS350/355
Description: L.H. AFT Beam
Supplier: Aero Design
Color: White
WO#: 2017-02 PO# N/A

Aero Design
Parts Distribution Sheet

WO# ______

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	1	AS350 AFT LH BEAM	78633-01-02	
16051	1	GRIP TAPE	3M SAFETY WALK	

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0100

4. Organization Name and Address	5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3	WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

~~14a. ☐ CAR 571.10 Maintenance Release~~

~~☐ Other regulation specified in block 12~~

~~Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.~~

13b. Signature	13c. Approved Organization Number	~~14b. Signature~~	~~14c. Approved Organization Number~~
AD 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	~~14d. Name~~	~~14e. Date (dd/mmm/yyyy)~~
Jeff Clarke - AD02	03 Mar 2017		

Installer Responsibilities

This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

AIRBUS HELICOPTERS

Aero Design Ltd.
9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity: 1
PN: 78633-01-02
Aircraft: Eurocopter Model: AS350/355
Description: L.H. AFT Beam
Supplier: Aero Design
Color: White
WO#: 2017-02 PO# N/A

Aero Design
Parts Distribution Sheet

WO# _____

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	1	AS350 AFT LH BEAM	7863-01-02	
16051	1	GRIP TAPE	3M SAFETY WALK	

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0105

4. Organization Name and Address	5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3	WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

14a. ☐ CAR 571.10 Maintenance Release

☐ Other regulation specified in block 12

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	14b. Signature	14c. Approved Organization Number
AO 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**14d. Name**	**14e. Date (dd/mmm/yyyy)**
Jeff Clarke - AD02	01 Mar 2017		

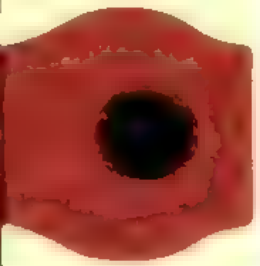
Installer Responsibilities

This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

MBR



Aero Design Ltd.
9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity: 1
PN: 78633-01-02
Aircraft: Eurocopter Model: AS350/355
Description: L.H. AFT Beam
Supplier: Aero Design
Color: White
WO#: 2017-02 PO# N/A

Aero Design
Parts Distribution Sheet

WO# _____

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	1	AS350 AFT LH BEAM	7863-01-02	
16051	1	GRIP TAPE	3M SAFETY WALK	

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0113

4. Organization Name and Address	5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3	WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	2	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

14a. ☐ CAR 571.10 Maintenance Release

☐ Other regulation specified in block 12

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	14b. Signature	14c. Approved Organization Number
AD 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**14d. Name**	**14e. Date (dd/mmm/yyyy)**
Jeff Clarke - AD02	02 Mar 2017		

Installer Responsibilities

This certificate does not constitute authority to install.

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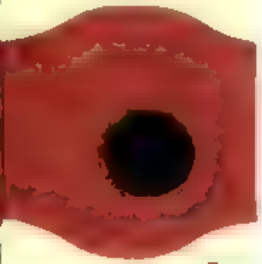
Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

SUNDANCE HELICOPTERS



Aero Design Ltd.
9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity: 1
PN: 78633-01-02
Aircraft: Eurocopter Model: AS350/355
Description: L.H. AFT Beam
Supplier: Aero Design
Color: White
WO#: 2017-02 PO# N/A

Aero Design Ltd.

9888 A Malaspina Rd. Powell River, BC, V8A 0G3

Phone: 604-483-2376 Fax: 604-483-2372 E-mail: info@aerodesign.ca

AMF 73-04

In Process

Remarks

Aero Design Ltd.

9888 A Malaspina Rd. Powell River, BC, V8A 0G3

Phone: 604-483-2376 Fax: 604-483-2372 E-mail: info@aerodesign.ca

AMF 73-04

Nomenclature: AS350 AFT. Beam No. of pieces: 8

Manufacturer: Aero Design Ltd.

Part No.: 78633-01-02 Serial/Batch No.: NA

TTSN: NA TSO: NA Rem.: NA

Work Order No.: 2017-02

Remaining Tasks to be Performed: straighten, inspect, powder coat.

Signature: [signature]

Date: Jan 27/2017 Lic. No. / SCA AD-05

In Process

Aero Design Ltd.

9888 A Malaspina Rd. Powell River, BC, V8A 0G3

Phone: 604-483-2376 Fax: 604-483-2372 E-mail: info@aerodesign.ca

AMF 73-04

In Process

Remarks

Aero Design Ltd.

9888 A Malaspina Rd. Powell River, BC, V8A 0G3

Phone: 604-483-2376 Fax: 604-483-2372 E-mail: info@aerodesign.ca

AMF 73-04

Nomenclature: AS350 LH AFT Beam No. of pieces: 1

Manufacturer: Aero Design Ltd

Part No.: 78633-01-02 Serial/Batch No.: N/A

TTSN: N/A TSO: N/A Rem.: N/A

Work Order No.: 2017-02

Remaining Tasks to be Performed: Straighten & deburr

Signature:

Date: Jan 24th/2017 Lic. No. / SCA AD-07

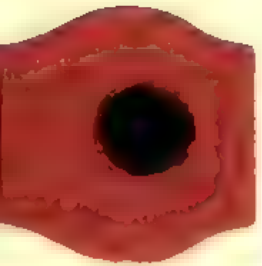
In Process

Aero Design

Parts Distribution Sheet

WO# _______

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	1	AS350 AFT LH BEAM	78633-01-02	
16051	1	GRIP TAPE	3M SAFETY WALK	



Aero Design Ltd.

9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity: 1
PN: 78633-01-02
Aircraft: Eurocopter Model: AS350/355
Description: L.H. AFT Beam
Supplier: Aero Design
Color: White
WO#: 2017-02 PO# N/A

Aero Design
Parts Distribution Sheet

WO# _______

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	1	AS350 AFT LH BEAM	78633-01-02	
16051	1	GRIP TAPE	3M SAFETY WALK	

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0119
4. Organization Name and Address		5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3		WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

~~14a.~~ ☐ ~~CAR 571.10 Maintenance Release~~

☐ ~~Other regulation specified in block 12~~

~~Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.~~

13b. Signature	13c. Approved Organization Number	~~14b. Signature~~	~~14c. Approved Organization Number~~
AD 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**~~14d. Name~~**	**~~14e. Date (dd/mmm/yyyy)~~**
Jeff Clarke - AD02	14 Mar 2017		

Installer Responsibilities

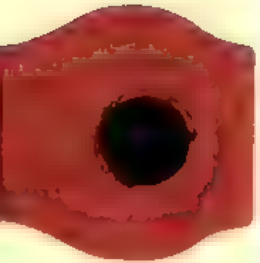
This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

~~HIGH TERRAIN HELICOPTERS~~ JC.

JÄMTLANDS FLYG JC. 21 MAR 2017



Aero Design Ltd.

9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity:	1	
PN:	78633-01-02	
Aircraft:	Eurocopter	Model: AS350/355
Description:	L.H. AFT Beam	
Supplier:	Aero Design	
Color:	White	
WO#:	2017-02	PO# N/A

Aero Design
Parts Distribution Sheet

WO# _____

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	1	AS350 AFT LH BEAM	7S633-01-02	
16051	1	GRIP TAPE	3M SAFETYWALK	

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0116

4. Organization Name and Address	5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3	WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

14a. ☐ CAR 571.10 Maintenance Release

☐ Other regulation specified in block 12

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	14b. Signature	14c. Approved Organization Number
AD 73-04 02	AMF 73-04		

13d. Name	13e. Date (dd/mmm/yyyy)	14d. Name	14e. Date (dd/mmm/yyyy)
Jeff Clarke - AD02	03 Mar 2017		

Installer Responsibilities

This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

TRK

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0135

4. Organization Name and Address	5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3	WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

~~14a.~~ ☐ CAR 571.10 Maintenance Release

☐ Other regulation specified in block 12

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	~~14b. Signature~~	~~14c. Approved Organization Number~~
Jeff Clarke AD 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**~~14d. Name~~**	**~~14e. Date (dd/mmm/yyyy)~~**
Jeff Clarke - AD02	11 Apr 2017		

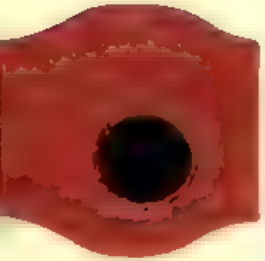
Installer Responsibilities

This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

JF MUGNIER



Aero Design Ltd.
9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity: 1
PN: 78633-01-02
Aircraft: Eurocopter Model: AS350/355
Description: L.H. AFT Beam
Supplier: Aero Design
Color: White
WO#: 2017-02 PO# N/A

JF MUGNIER

Aero Design

Parts Distribution Sheet

A/C or Part_____

Work Order # 2017-02

Date 11 APR 2017

Tracking Number	Quantity	Description	Part Number	Serial Number
2017-02	1	AS350 AFT LH BEAM	7633-01-02	
16051	1	GRIP TAPE	3M SAFETY WALK	

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0141

4. Organization Name and Address	5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3	WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

14a. ☐ CAR 571.10 Maintenance Release

☐ Other regulation specified in block 12

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	14b. Signature	14c. Approved Organization Number
AD 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**14d. Name**	**14e. Date (dd/mmm/yyyy)**
Jeff Clarke - AD02	12 Apr 2017		

Installer Responsibilities

This certificate does not constitute authority to install.

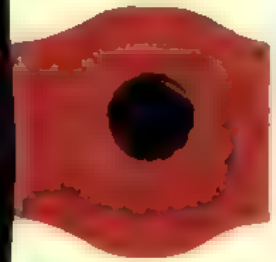
Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

AIRBUS HELICOPTERS

Aero Design Ltd.

9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)



Quantity: 1
PN: 78633-01-02
Aircraft: Eurocopter
Description: L.H. AFT Beam
Supplier: Aero Design
Color: White
WO#: 2017-02

Model: AS350/355

PO# N/A

1

Aero Design
Parts Distribution Sheet

A/C or Part__________
Work Order # 2017-02
Date 12 APR 2017

Tracking Number	Quantity	Description	Part Number	Serial Number
2017-02	1	AS350 AFT LH BEAM	78633-01-02	
16051	1	GRIP TAPE	3M SAFETY WALK	

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0146

4. Organization Name and Address	5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3	WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

~~14a.~~ ☐ CAR 571.10 Maintenance Release

☐ Other regulation specified in block 12

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	~~14b. Signature~~	~~14c. Approved Organization Number~~
AD 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**~~14d. Name~~**	**~~14e. Date (dd/mmm/yyyy)~~**
Jeff Clarke - AD02	13 Apr 2017		

Installer Responsibilities

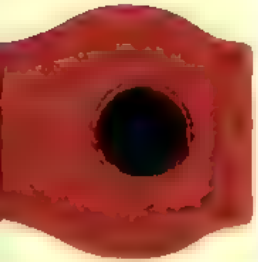
This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

HORIZON HELICOPTERS - Returned 24 MAY 2017 AD02

FOREST AIR HELICOPTERS - 29 MAY 2017 AD02



Aero Design Ltd.

9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity:	1	
PN:	78633-01-02	
Aircraft:	Eurocopter	Model: AS350/355
Description:	L.H. AFT Beam	
Supplier:	Aero Design	
Color:	White	
WO#:	2017-02	PO# N/A

Aero Design

Parts Distribution Sheet

WO# _______

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	1	AS350 AFT LH BEAM	78633-01-02	
16051	1	GRIP TAPE	3M SAFETY WALK	

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0157

4. Organization Name and Address	5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3	WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

14a. ☐ CAR 571.10 Maintenance Release

☐ Other regulation specified in block 12.

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	14b. Signature	14c. Approved Organization Number
Jeff Clarke AD 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**14d. Name**	**14e. Date (dd/mmm/yyyy)**
Jeff Clarke - AD02	24 Apr 2017		

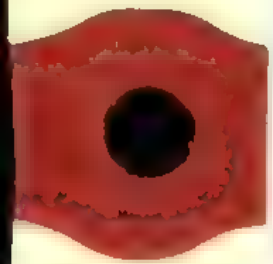
Installer Responsibilities

This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

HELI AUSTRIA



Aero Design Ltd.

9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity: 1
PN: 78633-01-02
Aircraft: Eurocopter Model: AS350/355
Description: L.H. AFT Beam
Supplier: Aero Design
Color: White
WO#: 2017-02 PO# N/A

Aero Design
Parts Distribution Sheet

WO# 2017-02

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	1	L.H AFt Beam	78633-01-02	
16051	1	Grip tape	3M Safety walk	

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0164
4. Organization Name and Address		5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3		WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

14a. ☐ CAR 571.10 Maintenance Release

☐ Other regulation specified in block 12

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	14b. Signature	14c. Approved Organization Number
AO 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**14d. Name**	**14e. Date (dd/mmm/yyyy)**
Jeff Clarke - AD02	26 Apr 2017		

Installer Responsibilities

This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

LAKELSE AIR

Aero Design Ltd.

9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity:	1	
PN:	78633-01-02	
Aircraft:	Eurocopter	Model: AS350/355
Description:	L.H. AFT Beam	
Supplier:	Aero Design	
Color:	White	
WO#:	2017-02	PO# N/A

Aero Design
Parts Distribution Sheet

WO# _______

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	1	AS350 AFT LH BEAM	78633-01-02	
16051	1	GRIP TAPE	3M SAFETY WALK	

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0181

4. Organization Name and Address	5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3	WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

14a. ☐ CAR 571.10 Maintenance Release

☐ Other regulation specified in block 12

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	14b. Signature	14c. Approved Organization Number
AD 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**14d. Name**	**14e. Date (dd/mmm/yyyy)**
Jeff Clarke - AD02	11 May 2017		

Installer Responsibilities

This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

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LR HELICOPTERS

Aero Design Ltd.
9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity: 1
PN: 78633-01-02
Aircraft: Eurocopter Model: AS350/355
Description: L.H. AFT Beam
Supplier: Aero Design
Color: White
WO#: 2017-02 PO# N/A

Aero Design

Parts Distribution Sheet

Description: AS350 LH Beams

WO# 2017-02

From PO or WO #	Quantity	Description	Part Number	For WO #
2017-02	1	LH Aft Beam	78633-01-02	
16051	1	Grip Tape	3M Safety Walk	

1. Approving Civil Aviation Authority/Country	2. AUTHORIZED RELEASE CERTIFICATE FORM ONE	3.Form Tracking No.
Transport Canada		2017-0360

4. Organization Name and Address	5. Work Order/Contract/Invoice
AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3	WO 2017-02

6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	LH Aft Beam	78633-01-02	1	N/A	New

12. Remarks

13a. Certifies that the items identified above were manufactured in conformity to:

☒ Approved design data and are in condition for safe operation.

☐ Non approved design data specified in block 12.

14a. ☐ CAR 571.10 Maintenance Release

☐ Other regulation specified in block 12

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the *Canadian Aviation Regulations*.

13b. Signature	13c. Approved Organization Number	14b. Signature	14c. Approved Organization Number
AO 73-04 02	AMF 73-04		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**14d. Name**	**14e. Date (dd/mmm/yyyy)**
Jeff Clarke - AD02	21 Sep 2017		

Installer Responsibilities

This certificate does not constitute authority to install.

Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.

Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.

AIRBUS HELICOPTERS

Aero Design Ltd.

9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity: 1
PN: 78633-01-02
Aircraft: Eurocopter Model: AS350/355
Description: L.H. AFT Beam
Supplier: Aero Design
Color: White
WO#: 2017-02 PO# N/A

AIRBUS HELICOPTERS

21 SEPT 2017

Aero Design

Parts Distribution Sheet

Description: AS350 LH Beams WO#

From PO or WO #	Quantity	Description	Part Number	For WO #
~~2017-103~~ 2017-02	1	LH Aft Beam	78633-01-02	
16051	1	Grip Tape	3M Safety Walk	

#1

MOUNTING BEAM FABRICATION – 78633/78634

General

These instructions apply to mounting beams 78633-01 (aft) and 78634-01 (forward) for AS350/AS355 cargo baskets. Refer to the following drawings, at the current revision, for dimensions and details:

78633, Revision 1 – Aft Beam
78634, Revision 1 – Forward Beam

Work Order: 2017-02 Batch Quantity: 5 AFT LH **Complete** (initial or SCA #)

Date Open: 03 Jan 2017

1. Beam Fabrication – 1x2 tubes – 78633-01 / 78634-01 — AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07
   a. Cut 1 x 2 x 0.065 material as indicated on drawings.
      i. 78633-02 – 24.44"
      ii. 78634-02 – 24.25"
   b. Cut 1 x 2 x 0.120 material @ 16.38" long for upper guide (10).
   c. Record material PO on attached material list.
   d. De-burr cut ends using a sanding disc on a die-grinder. De-burr inside with de-burring tool.
   e. Remove writing on tubes with acetone.
   f. Tag in-progress parts and place on in-progress shelf in machine shop for CNC machining of keyways, slots, and bushing holes.

2. CNC Machining – 78633-01 / 78634-01 — AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02
   a. Run CNC programs to machine slots and holes in 78633-02 tubes and 78634-02 tubes.
   b. Run CNC programs to machine blanks for upper guides.
   c. De-burr slots and holes.
   d. Tag in-progress parts and place on in-progress shelf in welding shop for welding.

3. Beam Fabrication – Components – 78633-01 — AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07
   Note: Some components are used for many different beams and are made in batches on separate component work orders. Check stock before making components.
   a. Shear caps from 0.025" sheet: 78633-06
   b. Cut 78633-03 guides from 1x1/8 stock.
   c. Cut and turn 78630-04 bushings from 3/8 x 0.065 tube:
      i. Cut stock to length + 0.03-0.06".
      ii. Face one end flat @ 1000 RPM.
      iii. De-burr outside with a file and inside with de-burring tool at 300 RPM.
      iv. Setup stop and face other end to length @ 1000 RPM.
      v. De-burr outside with a file and inside with a de-burring tool at 300 RPM.
   d. Cut 78633-04 upper guides from blanks machined in step 2.b.
   e. Cut 78633-05 stop brackets from 0.75 x 0.065 tube.
   f. Cut 82735-03 step tubes from 1.0 x 0.035 tube.
   g. Punch 82735-06 step cap from 0.050 sheet, 1.25 diameter. Flatten on steel table with a hammer.

h. Record component POs / WOs on attached material list and place on in-progress shelf in welding shop.

4. Beam Fabrication – Components – 78634-01 _____
   Note: Some components are used for many different beams and are made in batches on separate component work orders. Check stock before making components.
   a. Shear caps from 0.025" sheet: 78634-04.
   b. Cut 78634-03/78634-11/78634-12 pads from 1x1/8 stock. N/A
   c. Cut and turn 69830-11 guide tubes from ¾ x 0.065 tube:
      i. Cut stock to length + 0.03-0.06".
      ii. Face one end flat @ 1000 RPM.
      iii. De-burr outside with a file and inside with de-burring tool at 300 RPM.
      iv. Setup stop and face other end to length @ 1000 RPM.
      v. De-burr outside with a file and inside with a de-burring tool at 300 RPM.
   d. Cut 69830-07 blocks.
   e. Record component POs / WOs on attached material list and place on in-progress shelf in welding shop.

AD 73-04 05 | AD 73-04 05 | AD 73-04 05 | AD 73-04 05 | AD 73-04 05

5. Beam Welding – 78633-01
   a. TIG weld 78633-03 guide, 4 places, and 78633-04 upper guide into 78633-02 tubes using ER308L rod.
      i. Clamp two beams back to back with 1/8" spacer in middle to pre-stress beams prior to welding.
   b. Record component and welding rod POs / WOs on attached material list.
   c. Tag in-progress parts for straightening.

6. Beam Welding – 78634-01 _____
   a. TIG weld 78634-04 pad, 3 places; 78634-11 pad, 1 place, and 78634-12 pad, 1 place, into 78634-02 tube.
      i. Clamp two beams back to back with 1/8" spacer in middle to pre-stress beams prior to welding.
   b. Record component and welding rod POs / WOs on attached material list. N/A
   c. Tag in-progress parts and place on in-progress shelf in welding shop for straightening.

AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02

7. Beam Straightening – 78633-01 / 78634-01
   Welding on one side of the beam causes the beam to curve. Beams must be straight prior to machining slots.
   a. Set beam on blocks as far apart as possible on hydraulic press.
   b. Use a 2" block to distribute press loads.
   c. Gradually work up to pressure required to make beam straight, usually about 800 psi is required. The same pressure generally works for beams from the same batch.
   d. Check for straight with a straight edge on back of tube.
   e. 78633-01 aft beams may require straightening on side as well, repeat steps a-d on side, using about 600 psi.
   f. Tag in-progress parts and place on in-progress shelf in CNC shop for machining.

MOUNTING BEAM FABRICATION – 78633-01 / 78634-01 **Complete** (initial or SCA#)

8. CNC Machining – 78633-01 / 78634-01 AD 73-04 02 AD 73-04 02 AD 73-04 02 AD 73-04 02 AD 73-04 02
   a. Run CNC programs to machine keyways and slots in 78633-02 tubes with guides welded in place, after straightening.
   b. Run CNC programs to machine keyways and slots in 78634-02 tubes with pads welded in place, after straightening.
   c. De-burr keyways and slots.
   d. Tag in-progress parts and place on in-progress shelf in welding shop for welding.

9. Beam Welding – 78633-01 AD 73-04 05 AD 73-04 05 AD 73-04 05 AD 73-04 05 AD 73-04 05
   a. Peg step: TIG weld 82735-06 cap to 82735-05 tube using jig to align cap to tube.
   b. TIG weld 78633-04 bushings into 78633-02 tube using ER308L rod, four places per tube, both sides.
   c. TIG weld 78633-05 stop bracket to 78633-02 tube using ER308L rod, four places per tube, both sides. Use jig to align stop brackets for height and position.
   d. TIG weld 78633-06 cap to 78633-02 tube.
   e. TIG weld step tube assembly from a. to back of 78633-02 tube using jig for alignment. Weld around step tube as far as possible, then close out tube by flattening protruding edge of step tube with a hammer. Complete weld after flattening.
   f. Record component and welding rod POs / WOs on attached material list.
   g. Tag in-progress parts and place on in-progress shelf in welding shop for straightening.

10. Beam Welding – 78634-01 _____
   a. TIG weld 69830-11 guide tubes into 78634-02 tubes using ER308L rod, two places per down tube. Use jig to align guide tube to keyway and hole. Grind rosette welds flush.
   b. TIG weld 78633-04 bushings into 78634-02 tube using ER308L rod, four places per tube, both sides.
   c. TIG weld 69830-11 block to 78634-02 tube over 3rd keyway (see drawing) using ER308L rod. N/A
   d. TIG weld 78634-04 cap to 78634-02 tube. Ensure 0.25" gap between cap and pad for basket fitting to enter top keyway.
   e. Record component and welding rod POs / WOs on attached material list.
   f. Tag in-progress parts and place on in-progress shelf in welding shop for straightening.

11. Beam Finishing – 78633-01 / 78634-01 AD 73-04 07 AD 73-04 07 AD 73-04 07 AD 73-04 07 AD 73-04 07
   Welding on one side of the beam causes the beam to curve. Beams must be straight prior to powder coating.
   a. Set beam on blocks on hydraulic press. Straightening in sections may be required depending on severity of curve.
   b. Use a 2" block to distribute press loads.
   c. Gradually work up to pressure required to make beam straight, usually about 800 psi is required. The same pressure generally works for beams from the same batch.
   d. Check for straight with a straight edge on back of tube.
   e. 78633-01 aft beams may require straightening on side as well, repeat steps a-d on side, using about 600 psi.
   f. Drill out bushings to F (0.257"), four places per beam, on drill press.
   g. Break sharp edges on stops and flatten bushing locations using sanding disc on die-grinder.
   h. Tag in-progress parts and place on in-progress shelf in welding shop for inspection.

MOUNTING BEAM FABRICATION – 78633-01 / 78634-01

Complete (initial or SCA #)

12. Final Inspection – 78633-01 / 78634-01 — AD 73-04 01 | AD 73-04 01 | AD 73-04 01 | AD 73-04 01 | AD 73-04 01
    To be completed by a different person than the previous steps.
    a. Inspect beams 78633-01 and 78634-01 for conformity to drawings.
    b. Tag in-progress parts ready for powder coating.

13. Powder Coating — AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02
    a. Parts are to be powder coated white in accordance with commercial practices.
    b. Record powder coating PO.
    c. Inspect powder coating on receiving.
    d. Tag in-progress parts ready for final assembly.

14. Final Assembly – 78633-01 — AD 73-04 02 | AC 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02
    To be completed after powder coating.
    a. Prepare step tube for grip tape by rubbing top surface with scotch-brite.
    b. Adhere 1" 3M Safety-Walk grip tape to top surface of step tube.
    c. Adhere P/N placard to back surface of beam.
    d. Ensure AN4 bolt can be inserted through bushings.
    e. Green tag complete beam assembly and place into stock.

15. Final Assembly – 78634-01 _____
    To be completed after powder coating.
    a. Clear powder coat from stop pin hole(s) with 5/16 (#4) centre drill.
    b. For 776 (short), 764 (medium) or 784 (long) basket installation: Install #10-32 x 3" countersunk screw, 69830-21 stop, and 69830-23 spring into UPPER guide with 69830-22 knob and MS21044C3 nut. Check for function. N/A
    c. For 940 (extra large) basket installation: Install #10-32 x 3" countersunk screw, 69830-21 stop, and 69830-23 spring into LOWER guide with 69830-22 knob and MS21044C3 nut. Check for function.
    d. If maintenance step is to be installed: Install #10-32 x 3" countersunk screw, 69830-21 stop, and 69830-23 spring into LOWER guide with 69830-22 knob and MS21044C3 nut. Check for function.
    e. Adhere P/N placard to back surface of beam.
    f. Green tag complete beam assembly and place into stock.

#2

MOUNTING BEAM FABRICATION – 78633/78634

General

These instructions apply to mounting beams 78633-01 (aft) and 78634-01 (forward) for AS350/AS355 cargo baskets. Refer to the following drawings, at the current revision, for dimensions and details:

78633, Revision 1 – Aft Beam
78634, Revision 1 – Forward Beam

Work Order: 2017-02 Batch Quantity: 5 AFT LH

Date Open: 03 Jan 2017

Complete (initial or SCA #)

1. Beam Fabrication – 1x2 tubes – 78633-01 / 78634-01 — AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07
   a. Cut 1 x 2 x 0.065 material as indicated on drawings.
      i. 78633-02 – 24.44"
      ii. 78634-02 – 24.25"
   b. Cut 1 x 2 x 0.120 material @ 16.38" long for upper guide (10).
   c. Record material PO on attached material list.
   d. De-burr cut ends using a sanding disc on a die-grinder. De-burr inside with de-burring tool.
   e. Remove writing on tubes with acetone.
   f. Tag in-progress parts and place on in-progress shelf in machine shop for CNC machining of keyways, slots, and bushing holes.
2. CNC Machining – 78633-01 / 78634-01 — AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02
   a. Run CNC programs to machine slots and holes in 78633-02 tubes and 78634-02 tubes.
   b. Run CNC programs to machine blanks for upper guides.
   c. De-burr slots and holes.
   d. Tag in-progress parts and place on in-progress shelf in welding shop for welding.
3. Beam Fabrication – Components – 78633-01 — AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07
   Note: Some components are used for many different beams and are made in batches on separate component work orders. Check stock before making components.
   a. Shear caps from 0.025" sheet: 78633-06
   b. Cut 78633-03 guides from 1x1/8 stock.
   c. Cut and turn 78630-04 bushings from 3/8 x 0.065 tube:
      i. Cut stock to length + 0.03-0.06".
      ii. Face one end flat @ 1000 RPM.
      iii. De-burr outside with a file and inside with de-burring tool at 300 RPM.
      iv. Setup stop and face other end to length @ 1000 RPM.
      v. De-burr outside with a file and inside with a de-burring tool at 300 RPM.
   d. Cut 78633-04 upper guides from blanks machined in step 2.b.
   e. Cut 78633-05 stop brackets from 0.75 x 0.065 tube.
   f. Cut 82735-03 step tubes from 1.0 x 0.035 tube.
   g. Punch 82735-06 step cap from 0.050 sheet, 1.25 diameter. Flatten on steel table with a hammer.

h. Record component POs / WOs on attached material list and place on in-progress shelf in welding shop.

4. Beam Fabrication – Components – 78634-01 _____
   Note: Some components are used for many different beams and are made in batches on separate component work orders. Check stock before making components.
   a. Shear caps from 0.025" sheet: 78634-04.
   b. Cut 78634-03/78634-11/78634-12 pads from 1x1/8 stock. N/A
   c. Cut and turn 69830-11 guide tubes from ¾ x 0.065 tube:
      i. Cut stock to length + 0.03-0.06".
      ii. Face one end flat @ 1000 RPM.
      iii. De-burr outside with a file and inside with de-burring tool at 300 RPM.
      iv. Setup stop and face other end to length @ 1000 RPM.
      v. De-burr outside with a file and inside with a de-burring tool at 300 RPM.
   d. Cut 69830-07 blocks.
   e. Record component POs / WOs on attached material list and place on in-progress shelf in welding shop. AD 73-04 05 AD 73-04 05 AD 73-04 05 AD 73-04 05 AD 73-04 05

5. Beam Welding – 78633-01
   a. TIG weld 78633-03 guide, 4 places, and 78633-04 upper guide into 78633-02 tubes using ER308L rod.
      i. Clamp two beams back to back with 1/8" spacer in middle to pre-stress beams prior to welding.
   b. Record component and welding rod POs / WOs on attached material list.
   c. Tag in-progress parts for straightening.

6. Beam Welding – 78634-01 _____
   a. TIG weld 78634-04 pad, 3 places; 78634-11 pad, 1 place; and 78634-12 pad, 1 place, into 78634-02 tube.
      i. Clamp two beams back to back with 1/8" spacer in middle to pre-stress beams prior to welding. N/A
   b. Record component and welding rod POs / WOs on attached material list.
   c. Tag in-progress parts and place on in-progress shelf in welding shop for straightening. AD 73-04 02 AD 73-04 02 AD 73-04 02 AD 73-04 02 AD 73-04 02

7. Beam Straightening – 78633-01 / 78634-01
   Welding on one side of the beam causes the beam to curve. Beams must be straight prior to machining slots.
   a. Set beam on blocks as far apart as possible on hydraulic press.
   b. Use a 2" block to distribute press loads.
   c. Gradually work up to pressure required to make beam straight, usually about 800 psi is required. The same pressure generally works for beams from the same batch.
   d. Check for straight with a straight edge on back of tube.
   e. 78633-01 aft beams may require straightening on side as well, repeat steps a-d on side, using about 600 psi.
   f. Tag in-progress parts and place on in-progress shelf in CNC shop for machining.

MOUNTING BEAM FABRICATION – 78633-01 / 78634-01

Complete (Initial or SCA #)

8. CNC Machining – 78633-01 / 78634-01 — AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02
   a. Run CNC programs to machine keyways and slots in 78633-02 tubes with guides welded in place, after straightening.
   b. Run CNC programs to machine keyways and slots in 78634-02 tubes with pads welded in place, after straightening.
   c. De-burr keyways and slots.
   d. Tag in-progress parts and place on in-progress shelf in welding shop for welding.

9. Beam Welding – 78633-01 — AD 73-04 05 | AD 73-04 05 | AD 73-04 05 | AD 73-04 05 | AD 73-04 05
   a. Peg step: TIG weld 82735-06 cap to 82735-03 tube using jig to align cap to tube.
   b. TIG weld 78633-04 bushings into 78633-02 tube using ER308L rod, four places per tube, both sides.
   c. TIG weld 78633-05 stop bracket to 78633-02 tube using ER308L rod, four places per tube, both sides. Use jig to align stop brackets for height and position.
   d. TIG weld 78633-06 cap to 78633-02 tube.
   e. TIG weld step tube assembly from a. to back of 78633-02 tube using jig for alignment. Weld around step tube as far as possible, then close out tube by flattening protruding edge of step tube with a hammer. Complete weld after flattening.
   f. Record component and welding rod POs / WOs on attached material list.
   g. Tag in-progress parts and place on in-progress shelf in welding shop for straightening.

10. Beam Welding – 78634-01
    a. TIG weld 69830-11 guide tubes into 78634-02 tubes using ER308L rod, two places per down tube. Use jig to align guide tube to keyway and hole. Grind rosette welds flush.
    b. TIG weld 78633-04 bushings into 78634-02 tube using ER308L rod, four places per tube, both sides.
    c. TIG weld 69830-11 block to 78634-02 tube over 3rd keyway (see drawing) using ER308L rod. — N/A
    d. TIG weld 78634-04 cap to 78634-02 tube. Ensure 0.25" gap between cap and pad for basket fitting to enter top keyway.
    e. Record component and welding rod POs / WOs on attached material list.
    f. Tag in-progress parts and place on in-progress shelf in welding shop for straightening.

11. Beam Finishing – 78633-01 / 78634-01 — AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07
    Welding on one side of the beam causes the beam to curve. Beams must be straight prior to powder coating.
    a. Set beam on blocks on hydraulic press. Straightening in sections may be required depending on severity of curve.
    b. Use a 2" block to distribute press loads.
    c. Gradually work up to pressure required to make beam straight, usually about 800 psi is required. The same pressure generally works for beams from the same batch.
    d. Check for straight with a straight edge on back of tube.
    e. 78633-01 aft beams may require straightening on side as well, repeat steps a-d on side, using about 600 psi.
    f. Drill out bushings to F (0.257"), four places per beam, on drill press.
    g. Break sharp edges on stops and flatten bushing locations using sanding disc on die-grinder.
    h. Tag in-progress parts and place on in-progress shelf in welding shop for inspection.

MOUNTING BEAM FABRICATION – 78633-01 / 78634-01

Complete (initial or SCA #)

12. Final Inspection – 78633-01 / 78634-01 — AD 73-04 01 | AD 73-04 01 | AD 73-04 01 | AD 73-04 01 | AD 73-04 01

    To be completed by a different person than the previous steps.

    a. Inspect beams 78633-01 and 78634-01 for conformity to drawings.
    b. Tag in-progress parts ready for powder coating.

13. Powder Coating — AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02

    a. Parts are to be powder coated white in accordance with commercial practices.
    b. Record powder coating PO.
    c. Inspect powder coating on receiving.
    d. Tag in-progress parts ready for final assembly.

14. Final Assembly – 78633-01 — AD 73-04 02 | 73-04 02 | AD 73-04 02 | 73-04 02 | AD 73-04 02

    To be completed after powder coating.

    a. Prepare step tube for grip tape by rubbing top surface with scotch-brite.
    b. Adhere 1" 3M Safety-Walk grip tape to top surface of step tube.
    c. Adhere P/N placard to back surface of beam.
    d. Ensure AN4 bolt can be inserted through bushings.
    e. Green tag complete beam assembly and place into stock.

15. Final Assembly – 78634-01 _____

    To be completed after powder coating.

    a. Clear powder coat from stop pin hole(s) with 5/16 (#4) centre drill.
    b. For 776 (short), 764 (medium) or 784 (long) basket installation: Install #10-32 x 3" countersunk screw, 69830-21 stop, and 69830-23 spring into UPPER guide with 69830-22 knob and MS21044C3 nut. Check for function. N/A
    c. For 940 (extra large) basket installation: Install #10-32 x 3" countersunk screw, 69830-21 stop, and 69830-23 spring into LOWER guide with 69830-22 knob and MS21044C3 nut. Check for function.
    d. If maintenance step is to be installed: Install #10-32 x 3" countersunk screw, 69830-21 stop, and 69830-23 spring into LOWER guide with 69830-22 knob and MS21044C3 nut. Check for function.
    e. Adhere P/N placard to back surface of beam.
    f. Green tag complete beam assembly and place into stock.

#3

MOUNTING BEAM FABRICATION – 78633/78634

General

These instructions apply to mounting beams 78633-01 (aft) and 78634-01 (forward) for AS350/AS355 cargo baskets. Refer to the following drawings, at the current revision, for dimensions and details:

78633, Revision 1 – Aft Beam
78634, Revision 1 – Forward Beam

Work Order: 2017-02 Batch Quantity: 5 AFT LH

Date Open: 03 Jan 2017

Complete (initial or SCA #)

1. Beam Fabrication – 1x2 tubes – 78633-01 / 78634-01 — AD 73-04 02 | AD 73-04 02 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07
   a. Cut 1 x 2 x 0.065 material as indicated on drawings. — AD 73-04 07 | AD 73-04 07
      i. 78633-02 – 24.44"
      ii. 78634-02 – 24.25"
   b. Cut 1 x 2 x 0.120 material @ 16.38" long for upper guide (10).
   c. Record material PO on attached material list.
   d. De-burr cut ends using a sanding disc on a die-grinder. De-burr inside with de-burring tool.
   e. Remove writing on tubes with acetone.
   f. Tag in-progress parts and place on in-progress shelf in machine shop for CNC machining of keyways, slots, and bushing holes.

2. CNC Machining – 78633-01 / 78634-01 — AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02
   a. Run CNC programs to machine slots and holes in 78633-02 tubes and 78634-02 tubes.
   b. Run CNC programs to machine blanks for upper guides.
   c. De-burr slots and holes.
   d. Tag in-progress parts and place on in-progress shelf in welding shop for welding.

3. Beam Fabrication – Components – 78633-01 — AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07
   Note: Some components are used for many different beams and are made in batches on separate component work orders. Check stock before making components.
   a. Shear caps from 0.025" sheet: 78633-06
   b. Cut 78633-03 guides from 1x1/8 stock.
   c. Cut and turn 78630-04 bushings from 3/8 x 0.065 tube:
      i. Cut stock to length + 0.03-0.06".
      ii. Face one end flat @ 1000 RPM.
      iii. De-burr outside with a file and inside with de-burring tool at 300 RPM.
      iv. Setup stop and face other end to length @ 1000 RPM.
      v. De-burr outside with a file and inside with a de-burring tool at 300 RPM.
   d. Cut 78633-04 upper guides from blanks machined in step 2.b.
   e. Cut 78633-05 stop brackets from 0.75 x 0.065 tube.
   f. Cut 82735-03 step tubes from 1.0 x 0.035 tube.
   g. Punch 82735-06 step cap from 0.050 sheet, 1.25 diameter. Flatten on steel table with a hammer.

h. Record component POs / WOs on attached material list and place on in-progress shelf in welding shop.

4. Beam Fabrication – Components – 78634-01 _____

Note: Some components are used for many different beams and are made in batches on separate component work orders. Check stock before making components.

a. Shear caps from 0.025" sheet: 78634-04.
b. Cut 78634-03/78634-11/78634-12 pads from 1x1/8 stock. N/A
c. Cut and turn 69830-11 guide tubes from ¾ x 0.065 tube:
   i. Cut stock to length + 0.03-0.06".
   ii. Face one end flat @ 1000 RPM.
   iii. De-burr outside with a file and inside with de-burring tool at 300 RPM.
   iv. Setup stop and face other end to length @ 1000 RPM.
   v. De-burr outside with a file and inside with a de-burring tool at 300 RPM.
d. Cut 69830-07 blocks.
e. Record component POs / WOs on attached material list and place on in-progress shelf in welding shop.

5. Beam Welding – 78633-01 AD 73-04 05 AD 73-04 05 AD 73-04 05 AD 73-04 05 AD 73-04 05

a. TIG weld 78633-03 guide, 4 places, and 78633-04 upper guide into 78633-02 tubes using ER308L rod.
   i. Clamp two beams back to back with 1/8" spacer in middle to pre-stress beams prior to welding.
b. Record component and welding rod POs / WOs on attached material list.
c. Tag in-progress parts for straightening.

6. Beam Welding – 78634-01 _____

a. TIG weld 78634-04 pad, 3 places; 78634-11 pad, 1 place; and 78634-12 pad, 1 place, into 78634-02 tube. N/A
   i. Clamp two beams back to back with 1/8" spacer in middle to pre-stress beams prior to welding.
b. Record component and welding rod POs / WOs on attached material list.
c. Tag in-progress parts and place on in-progress shelf in welding shop for straightening.

7. Beam Straightening – 78633-01 / 78634-01 AD 73-04 02 AD 73-04 02 AD 73-04 02 AD 73-04 02 AD 73-04 02

Welding on one side of the beam causes the beam to curve. Beams must be straight prior to machining slots.

a. Set beam on blocks as far apart as possible on hydraulic press.
b. Use a 2" block to distribute press loads.
c. Gradually work up to pressure required to make beam straight, usually about 800 psi is required. The same pressure generally works for beams from the same batch.
d. Check for straight with a straight edge on back of tube.
e. 78633-01 aft beams may require straightening on side as well, repeat steps a-d on side, using about 600 psi.
f. Tag in-progress parts and place on in-progress shelf in CNC shop for machining.

MOUNTING BEAM FABRICATION – 78633-01 / 78634-01

Complete (initial or SCA #)

8. CNC Machining – 78633-01 / 78634-01 — AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02
   a. Run CNC programs to machine keyways and slots in 78633-02 tubes with guides welded in place, after straightening.
   b. Run CNC programs to machine keyways and slots in 78634-02 tubes with pads welded in place, after straightening.
   c. De-burr keyways and slots.
   d. Tag in-progress parts and place on in-progress shelf in welding shop for welding.

9. Beam Welding – 78633-01 — AD 73-04 05 | AD 73-04 05 | AD 73-04 05 | AD 73-04 05 | AD 73-04 05
   a. Peg step: TIG weld 82735-06 cap to 82735-03 tube using jig to align cap to tube.
   b. TIG weld 78633-04 bushings into 78633-02 tube using ER308L rod, four places per tube, both sides.
   c. TIG weld 78633-05 stop bracket to 78633-02 tube using ER308L rod, four places per tube, both sides. Use jig to align stop brackets for height and position.
   d. TIG weld 78633-06 cap to 78633-02 tube.
   e. TIG weld step tube assembly from a. to back of 78633-02 tube using jig for alignment. Weld around step tube as far as possible, then close out tube by flattening protruding edge of step tube with a hammer. Complete weld after flattening.
   f. Record component and welding rod POs / WOs on attached material list.
   g. Tag in-progress parts and place on in-progress shelf in welding shop for straightening.

10. Beam Welding – 78634-01 — N/A
    a. TIG weld 69830-11 guide tubes into 78634-02 tubes using ER308L rod, two places per down tube. Use jig to align guide tube to keyway and hole. Grind rosette welds flush.
    b. TIG weld 78633-04 bushings into 78634-02 tube using ER308L rod, four places per tube, both sides.
    c. TIG weld 69830-11 block to 78634-02 tube over 3rd keyway (see drawing) using ER308L rod.
    d. TIG weld 78634-04 cap to 78634-02 tube. Ensure 0.25" gap between cap and pad for basket fitting to enter top keyway.
    e. Record component and welding rod POs / WOs on attached material list.
    f. Tag in-progress parts and place on in-progress shelf in welding shop for straightening.

11. Beam Finishing – 78633-01 / 78634-01 — AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07
    Welding on one side of the beam causes the beam to curve. Beams must be straight prior to powder coating.
    a. Set beam on blocks on hydraulic press. Straightening in sections may be required depending on severity of curve.
    b. Use a 2" block to distribute press loads.
    c. Gradually work up to pressure required to make beam straight, usually about 800 psi is required. The same pressure generally works for beams from the same batch.
    d. Check for straight with a straight edge on back of tube.
    e. 78633-01 aft beams may require straightening on side as well, repeat steps a-d on side, using about 600 psi.
    f. Drill out bushings to F (0.257"), four places per beam, on drill press.
    g. Break sharp edges on stops and flatten bushing locations using sanding disc on die-grinder.
    h. Tag in-progress parts and place on in-progress shelf in welding shop for inspection.

MOUNTING BEAM FABRICATION – 78633-01 / 78634-01 **Complete** (initial or SCA #)

12. Final Inspection – 78633-01 / 78634-01 AD 73-04 01 | AD 73-04 01 | AD 73-04 01 | AD 73-04 01 | AD 73-04 01
    To be completed by a different person than the previous steps.
    a. Inspect beams 78633-01 and 78634-01 for conformity to drawings.
    b. Tag in-progress parts ready for powder coating.

13. Powder Coating AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02
    a. Parts are to be powder coated white in accordance with commercial practices.
    b. Record powder coating PO.
    c. Inspect powder coating on receiving.
    d. Tag in-progress parts ready for final assembly. AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02

14. Final Assembly – 78633-01
    To be completed after powder coating.
    a. Prepare step tube for grip tape by rubbing top surface with scotch-brite.
    b. Adhere 1" 3M Safety-Walk grip tape to top surface of step tube.
    c. Adhere P/N placard to back surface of beam.
    d. Ensure AN4 bolt can be inserted through bushings.
    e. Green tag complete beam assembly and place into stock.

15. Final Assembly – 78634-01 _____
    To be completed after powder coating.
    a. Clear powder coat from stop pin hole(s) with 5/16 (#4) centre drill.
    b. For 776 (short), 764 (medium) or 784 (long) basket installation: Install #10-32 x 3" countersunk screw, 69830-21 stop, and 69830-23 spring into UPPER guide with 69830-22 knob and MS21044C3 nut. Check for function. N/A
    c. For 940 (extra large) basket installation: Install #10-32 x 3" countersunk screw, 69830-21 stop, and 69830-23 spring into LOWER guide with 69830-22 knob and MS21044C3 nut. Check for function.
    d. If maintenance step is to be installed: Install #10-32 x 3" countersunk screw, 69830-21 stop, and 69830-23 spring into LOWER guide with 69830-22 knob and MS21044C3 nut. Check for function.
    e. Adhere P/N placard to back surface of beam.
    f. Green tag complete beam assembly and place into stock.

#4

MOUNTING BEAM FABRICATION – 78633/78634

General

These instructions apply to mounting beams 78633-01 (aft) and 78634-01 (forward) for AS350/AS355 cargo baskets. Refer to the following drawings, at the current revision, for dimensions and details:

78633, Revision 1 – Aft Beam
78634, Revision 1 – Forward Beam

Work Order: 2017-02 Batch Quantity: 5 AFT LH

Date Open: 03 Jan 2017-

Complete (initial or SCA #)

1. Beam Fabrication – 1x2 tubes – 78633-01 / 78634-01 — AD 73-04 01 | AD 73-04 01 | AD 73-04 01 | AD 73-04 01 | AD 73-04 01
   a. Cut 1 x 2 x 0.065 material as indicated on drawings.
      i. 78633-02 – 24.44"
      ii. 78634-02 – 24.25"
   b. Cut 1 x 2 x 0.120 material @ 16.38" long for upper guide (10).
   c. Record material PO on attached material list.
   d. De-burr cut ends using a sanding disc on a die-grinder. De-burr inside with de-burring tool.
   e. Remove writing on tubes with acetone.
   f. Tag in-progress parts and place on in-progress shelf in machine shop for CNC machining of keyways, slots, and bushing holes.
2. CNC Machining – 78633-01 / 78634-01 — AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02
   a. Run CNC programs to machine slots and holes in 78633-02 tubes and 78634-02 tubes.
   b. Run CNC programs to machine blanks for upper guides.
   c. De-burr slots and holes.
   d. Tag in-progress parts and place on in-progress shelf in welding shop for welding.
3. Beam Fabrication – Components – 78633-01 — AD 73-04 01 | AD 73-04 01 | AD 73-04 01 | AD 73-04 01 | AD 73-04 01
   Note: Some components are used for many different beams and are made in batches on separate component work orders. Check stock before making components.
   a. Shear caps from 0.025" sheet: 78633-06
   b. Cut 78633-03 guides from 1x1/8 stock.
   c. Cut and turn 78630-04 bushings from 3/8 x 0.065 tube:
      i. Cut stock to length + 0.03-0.06".
      ii. Face one end flat @ 1000 RPM.
      iii. De-burr outside with a file and inside with de-burring tool at 300 RPM.
      iv. Setup stop and face other end to length @ 1000 RPM.
      v. De-burr outside with a file and inside with a de-burring tool at 300 RPM.
   d. Cut 78633-04 upper guides from blanks machined in step 2.b.
   e. Cut 78633-05 stop brackets from 0.75 x 0.065 tube.
   f. Cut 82735-03 step tubes from 1.0 x 0.035 tube.
   g. Punch 82735-06 step cap from 0.050 sheet, 1.25 diameter. Flatten on steel table with a hammer.

h. Record component POs / WOs on attached material list and place on in-progress shelf in welding shop. AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07 | AD 73-04 07

4. Beam Fabrication – Components – 78634-01

Note: Some components are used for many different beams and are made in batches on separate component work orders. Check stock before making components.

a. Shear caps from 0.025" sheet: 78634-04.
b. Cut 78634-03/78634-11/78634-12 pads from 1x1/8 stock.
c. Cut and turn 69830-11 guide tubes from ¾ x 0.065 tube: N/A
   i. Cut stock to length + 0.03-0.06".
   ii. Face one end flat @ 1000 RPM.
   iii. De-burr outside with a file and inside with de-burring tool at 300 RPM.
   iv. Setup stop and face other end to length @ 1000 RPM.
   v. De-burr outside with a file and inside with a de-burring tool at 300 RPM.
d. Cut 69830-07 blocks.
e. Record component POs / WOs on attached material list and place on in-progress shelf in welding shop. AD 73-04 05 | AD 73-04 05 | AD 73-04 05 | AD 73-04 05 | AD 73-04 05

5. Beam Welding – 78633-01

a. TIG weld 78633-03 guide, 4 places, and 78633-04 upper guide into 78633-02 tubes using ER308L rod.
   i. Clamp two beams back to back with 1/8" spacer in middle to pre-stress beams prior to welding.
b. Record component and welding rod POs / WOs on attached material list.
c. Tag in-progress parts for straightening.

6. Beam Welding – 78634-01 _____

a. TIG weld 78634-04 pad, 3 places; 78634-11 pad, 1 place; and 78634-12 pad, 1 place, into 78634-02 tube. N/A
   i. Clamp two beams back to back with 1/8" spacer in middle to pre-stress beams prior to welding.
b. Record component and welding rod POs / WOs on attached material list.
c. Tag in-progress parts and place on in-progress shelf in welding shop for straightening. AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02

7. Beam Straightening – 78633-01 / 78634-01

Welding on one side of the beam causes the beam to curve. Beams must be straight prior to machining slots.

a. Set beam on blocks as far apart as possible on hydraulic press.
b. Use a 2" block to distribute press loads.
c. Gradually work up to pressure required to make beam straight, usually about 800 psi is required. The same pressure generally works for beams from the same batch.
d. Check for straight with a straight edge on back of tube.
e. 78633-01 aft beams may require straightening on side as well, repeat steps a-d on side, using about 600 psi.
f. Tag in-progress parts and place on in-progress shelf in CNC shop for machining.

MOUNTING BEAM FABRICATION – 78633-01 / 78634-01 **Complete** (initial or SCA #)

8. CNC Machining – 78633-01 / 78634-01 AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02
   a. Run CNC programs to machine keyways and slots in 78633-02 tubes with guides welded in place, after straightening.
   b. Run CNC programs to machine keyways and slots in 78634-02 tubes with pads welded in place, after straightening.
   c. De-burr keyways and slots.
   d. Tag in-progress parts and place on in-progress shelf in welding shop for welding.

9. Beam Welding – 78633-01 AD 73-04 05 | AD 73-04 05 | AD 73-04 05 | AD 73-04 05 | AD 73-04 05
   a. Peg step: TIG weld 82735-06 cap to 82735-03 tube using jig to align cap to tube.
   b. TIG weld 78633-04 bushings into 78633-02 tube using ER308L rod, four places per tube, both sides.
   c. TIG weld 78633-05 stop bracket to 78633-02 tube using ER308L rod, four places per tube, both sides. Use jig to align stop brackets for height and position.
   d. TIG weld 78633-06 cap to 78633-02 tube.
   e. TIG weld step tube assembly from a. to back of 78633-02 tube using jig for alignment. Weld around step tube as far as possible, then close out tube by flattening protruding edge of step tube with a hammer. Complete weld after flattening.
   f. Record component and welding rod POs / WOs on attached material list.
   g. Tag in-progress parts and place on in-progress shelf in welding shop for straightening.

10. Beam Welding – 78634-01 N/A
   a. TIG weld 69830-11 guide tubes into 78634-02 tubes using ER308L rod, two places per down tube. Use jig to align guide tube to keyway and hole. Grind rosette welds flush.
   b. TIG weld 78633-04 bushings into 78634-02 tube using ER308L rod, four places per tube, both sides.
   c. TIG weld 69830-11 block to 78634-02 tube over 3rd keyway (see drawing) using ER308L rod.
   d. TIG weld 78634-04 cap to 78634-02 tube. Ensure 0.25" gap between cap and pad for basket fitting to enter top keyway.
   e. Record component and welding rod POs / WOs on attached material list.
   f. Tag in-progress parts and place on in-progress shelf in welding shop for straightening.

11. Beam Finishing – 78633-01 / 78634-01 A 73-04 01 | AD 73-04 01 | AD 73-04 01 | AD 73-04 01 | AD 73-04 01
   Welding on one side of the beam causes the beam to curve. Beams must be straight prior to powder coating.
   a. Set beam on blocks on hydraulic press. Straightening in sections may be required depending on severity of curve.
   b. Use a 2" block to distribute press loads.
   c. Gradually work up to pressure required to make beam straight, usually about 800 psi is required. The same pressure generally works for beams from the same batch.
   d. Check for straight with a straight edge on back of tube.
   e. 78633-01 aft beams may require straightening on side as well, repeat steps a-d on side, using about 600 psi.
   f. Drill out bushings to F (0.257"), four places per beam, on drill press.
   g. Break sharp edges on stops and flatten bushing locations using sanding disc on die-grinder.
   h. Tag in-progress parts and place on in-progress shelf in welding shop for inspection.

MOUNTING BEAM FABRICATION – 78633-01 / 78634-01

Complete (initial or SCA #)

12. Final Inspection – 78633-01 / 78634-01 — AD 73-04 01 | AD 73-04 01 | AD 73-04 01 | AD 73-04 01 | AD 73-04 01
    To be completed by a different person than the previous steps.
    a. Inspect beams 78633-01 and 78634-01 for conformity to drawings.
    b. Tag in-progress parts ready for powder coating.

13. Powder Coating — AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02
    a. Parts are to be powder coated white in accordance with commercial practices.
    b. Record powder coating PO.
    c. Inspect powder coating on receiving.
    d. Tag in-progress parts ready for final assembly.

14. Final Assembly – 78633-01 — AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73-04 02 | AD 73- 02
    To be completed after powder coating.
    a. Prepare step tube for grip tape by rubbing top surface with scotch-brite.
    b. Adhere 1" 3M Safety-Walk grip tape to top surface of step tube.
    c. Adhere P/N placard to back surface of beam.
    d. Ensure AN4 bolt can be inserted through bushings.
    e. Green tag complete beam assembly and place into stock.

15. Final Assembly – 78634-01 _____
    To be completed after powder coating.
    a. Clear powder coat from stop pin hole(s) with 5/16 (#4) centre drill.
    b. For 776 (short), 764 (medium) or 784 (long) basket installation: Install #10-32 x 3" countersunk screw, 69830-21 stop, and 69830-23 spring into UPPER guide with 69830-22 knob and MS21044C3 nut. Check for function. N/A
    c. For 940 (extra large) basket installation: Install #10-32 x 3" countersunk screw, 69830-21 stop, and 69830-23 spring into LOWER guide with 69830-22 knob and MS21044C3 nut. Check for function.
    d. If maintenance step is to be installed: Install #10-32 x 3" countersunk screw, 69830-21 stop, and 69830-23 spring into LOWER guide with 69830-22 knob and MS21044C3 nut. Check for function.
    e. Adhere P/N placard to back surface of beam.
    f. Green tag complete beam assembly and place into stock.

Work Order: 2017-02

Date Opened: 03 Jan 2017

Material Tracking Sheet
Eurocopter AS350/AS355 Aft Mounting Beam

Ass'y Step	Qty	Detail Drawing	Part Number	Description	Material	PO/WO
	20		**78633-01-02**	**Aft Beam Assembly**	(XX = -01 RH, -02 LH)	
Step 1				*Fabrication*		
	.1		78633-02	Tube	1x2x0.065 Tube, 304 Stainless Steel	~~17005~~ QB
	.1	50 total	78633-04	Upper Guide	1x2x0.12 Tube, 304 Stainless Steel	15073/2015-69 (9)
Step 2				*Machning*	*None*	
Step 3				*Fabrication*		
	.4		78633-03	Guide	1x0.125 Bar, 304 Stainless Steel	16058
	.4		78633-05	Stop Bracket	0.75x0.065 Sqr. Tube, 304 Stainless	15038
	.1		78633-06	Cap	0.025" Sheet, 321 Stainless Steel	3021
	.4		78630-04	Bushing	0.375 x 0.065 Tube, 304 Stainless Steel	15073
	.1		82735-03	Tube	1.0 x 0.035 Tube, 316 Stainless Steel	15073/~~17005~~
	.1		82735-06	Cap	0.050 Sheet, 321 Stainless Steel	3021
Step 5				*Welding*		
	.A/R			Welding Rod	ER308L	14028
Step 7				*Straightening*	*None*	
Step 8				*Machning*	*None*	
Step 9				*Welding*		
	.A/R			Welding Rod	ER308L	14028
Step 11				*Finishing*	*None*	
Step 12				*Final Inspection*	*None*	
Step 13				*Powder Coating*		17010/17012/17035 (3) (8) (5) remainder painted
		Detail				

Work Order: 2017-02

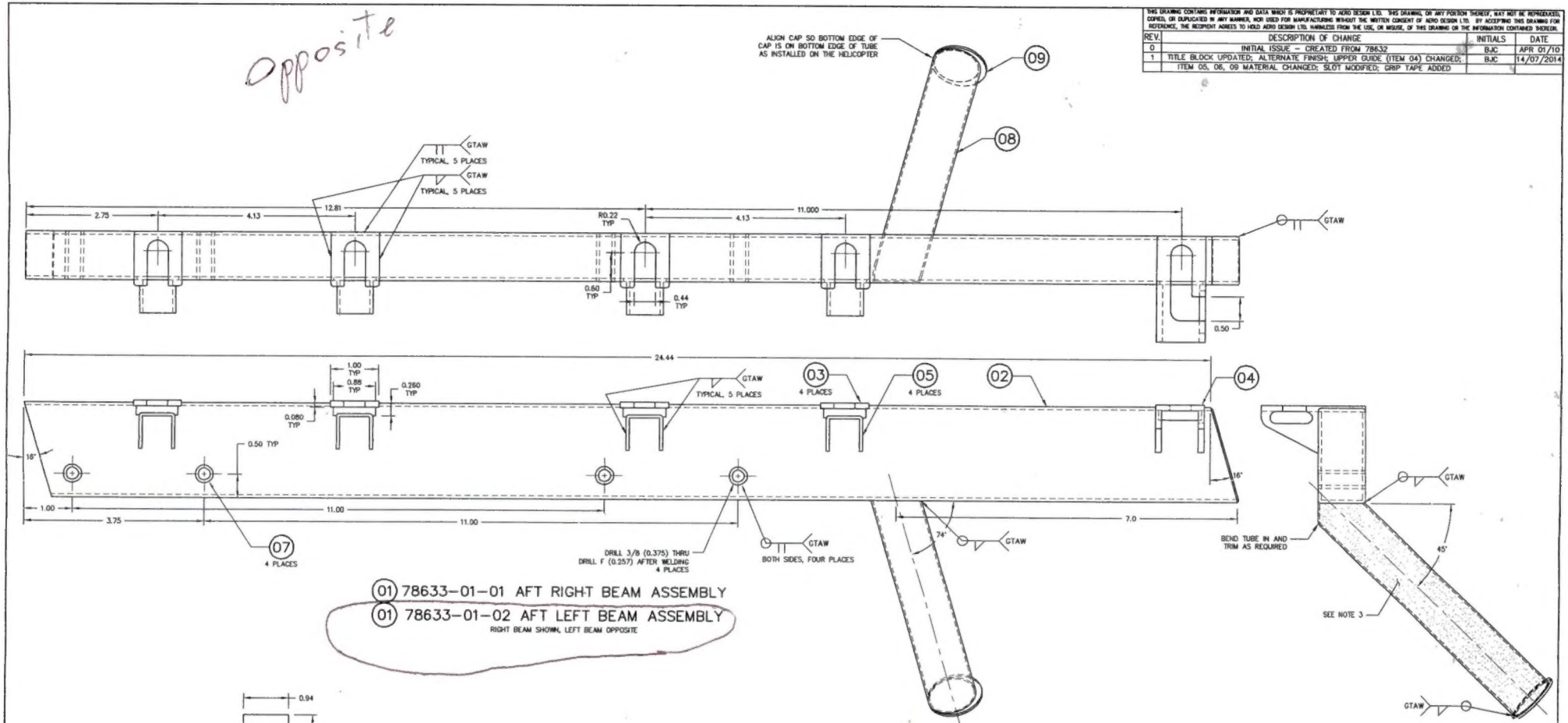
Date Opened: 23Jan 2017

Material Tracking Sheet
Eurocopter AS350/AS355 Aft Mounting Beam

Ass'y Step	Qty	Drawing	Part Number	Description	Material	PO/WO
Step 14				*Final Assembly*		
	. 1		--	Grip Tape	1" 3M Safety Walk	
	. 1		--	P/N Placard	TZ tape, 1/2", white on black	

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE – CREATED FROM 78632	BJC	APR 01/10
1	TITLE BLOCK UPDATED; ALTERNATE FINISH; UPPER GUIDE (ITEM 04) CHANGED;	BJC	14/07/2014
	ITEM 05, 06, 09 MATERIAL CHANGED; SLOT MODIFIED; GRIP TAPE ADDED		

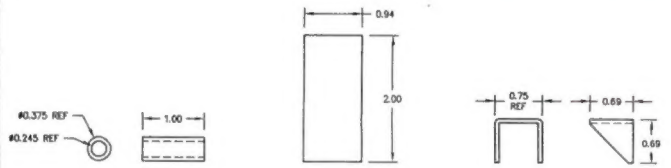
Opposite



01 78633-01-01 AFT RIGHT BEAM ASSEMBLY

01 78633-01-02 AFT LEFT BEAM ASSEMBLY

RIGHT BEAM SHOWN, LEFT BEAM OPPOSITE

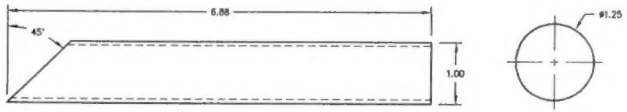


07 BUSHING | 06 CAP | 05 STOP BRACKET | 04 UPPER GUIDE | 03 GUIDE

RIGHT PART SHOWN, LEFT PART OPPOSITE

NOTES

1. REMOVE ALL BURRS AND BREAK SHARP EDGES.
2. WELDING OF 304 STAINLESS STEEL TO BE COMPLETED BY GTAW METHOD TO AMS2685C. WELDING ROD SHALL CONFORM TO ER308L OR EQUIVALENT.
3. FINISH: ALL STEEL PARTS TO BE THOROUGHLY DEGREASED AND POWDER COATED PRIOR TO ASSEMBLY. ALTERNATE: ALL STEEL PARTS TO BE THOROUGHLY DEGREASED, PRIMED AND PAINTED PRIOR TO ASSEMBLY. APPLY GRIP TAPE TO TOP SURFACE OF STEP AFTER FINISHING.



08 TUBE | 09 CAP

-02	-01	ITEM	PART NO.	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE
1	1	10	78633-10	GRIP TAPE	3M SAFETY WALK	COMMERCIAL	1" WIDE
1	1	09	78633-09	CAP	304 STAINLESS STEEL	AMS 5513	0.050 SHEET
1	1	08	78633-08	TUBE	316 STAINLESS STEEL	ASTM A269	1.0 X 0.065 TUBE
4	4	07	78630-04	BUSHING	304 STAINLESS STEEL	ASTM A269	#0.375 X 0.065 RND. TUBE
1	1	06	78633-06	CAP	304 STAINLESS STEEL	AMS 5513	0.050 SHEET
4	4	05	78633-05	STOP BRACKET	304 STAINLESS STEEL	ASTM A554	0.75 X 0.035 SQR. TUBE
1	1	04	78633-04	UPPER GUIDE	304 STAINLESS STEEL	ASTM A554	1 X 2 X 0.125 TUBE
4	4	03	78633-03	GUIDE	304 STAINLESS STEEL	ASTM A240	1.0 X 0.125 BAR
1	1	02	78633-02	TUBE	304 STAINLESS STEEL	ASTM A554	1 X 2 X 0.065 TUBE
		01	78633-01-02	AFT LEFT BEAM ASS'Y			
		01	78633-01-01	AFT RIGHT BEAM ASS'Y			
QTY 78633-01				LIST OF MATERIALS			

APPROVALS	DATE
DRAWN: JEFF CLARKE	01 APR 2010
CHECKED: E. BURGOIN	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:

DECIMALS	ANGLES
X.XXX ±0.010	±1/2°
X.XX ±0.03	
X.X ±0.1	

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EUROCOPTER AS350 & AS355 SERIES
ATTACHMENT PROVISIONS
AFT BEAM FABRICATION

SCALE 1 : 1	DWG. SIZE	DWG. NO.	REV.
SHEET 1 OF 1	A1	78633	1